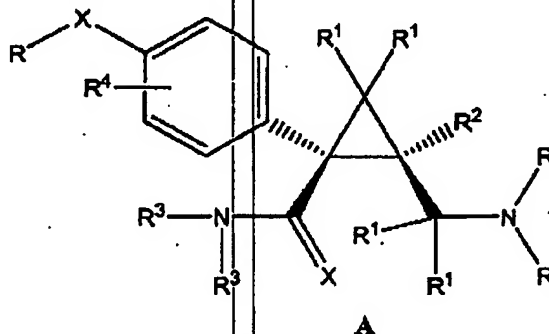


*In the claims:*

1. (currently amended) An isolated compound represented by A:



wherein

X represents independently for each occurrence O [[,]] or S [[, or NR]];

R represents independently for each occurrence H [[, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, formyl, acyl, silyl, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ]];

$R^1$  represents independently for each occurrence H [[, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ]];

$R^2$  represents independently for each occurrence H [[, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, or  $-(CH_2)_m-R_{80}$ ]];

$R^3$  represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, [[aryl, heteroaryl,]] or arylalkyl [[, or  $-(CH_2)_m-R_{80}$ ]];

$R^4$  is absent or present between one and four times inclusive;

3-k-20 enter 8/11/10/or-

$R^4$ , if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ;

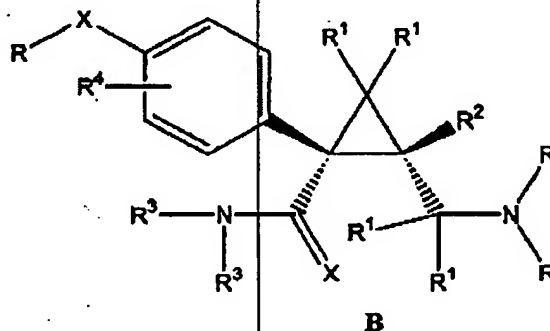
$R_{80}$  represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

$m$  is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

2. (currently amended) An isolated compound represented by B:



wherein

$X$  represents independently for each occurrence O [[,] or S [[, or NR]];

$R$  represents independently for each occurrence H [[, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, formyl, acyl, silyl, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ];

$R^1$  represents independently for each occurrence H [[, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino,

alkylamino, arylamino, arylakylamino, sulfhydryl, alkylthio, arylthio, arylakylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylaminocarbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}]$ ;

$R^2$  represents independently for each occurrence H [, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, or  $-(CH_2)_m-R_{80}]$ ;

$R^3$  represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, [[aryl, heteroaryl,]] or arylalkyl [, or  $-(CH_2)_m-R_{80}]$ ;

$R^4$  is absent or present between one and four times inclusive;

$R^4$ , if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylakylamino, sulfhydryl, alkylthio, arylthio, arylakylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylaminocarbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ;

$R_{80}$  represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

$m$  is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

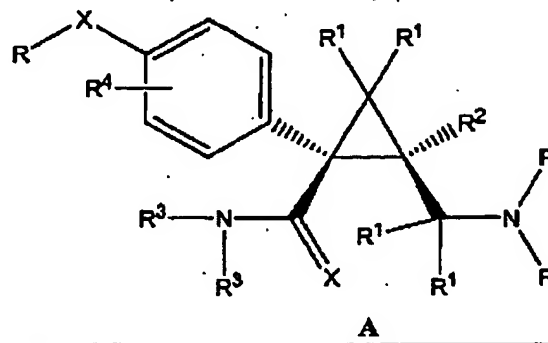
3. (original) The compound of claim 1 or 2, wherein X represents O.
4. (canceled)
5. (canceled)
6. (canceled)
7. (original) The compound of claim 1 or 2, wherein  $R^3$  represents alkyl.
8. (original) The compound of claim 1 or 2, wherein  $R^4$  is absent.

9. (canceled)
10. (canceled)
11. (canceled)
12. (currently amended) The compound of claim 1 or 2, wherein X represents O; [[R represents H; R<sup>1</sup> represents H; R<sup>2</sup> represents H;]] and R<sup>3</sup> represents alkyl.
13. (currently amended) The compound of claim 1 or 2, wherein X represents O; [[R represents H; R<sup>1</sup> represents H; R<sup>2</sup> represents H;]] R<sup>3</sup> represents alkyl; and R<sup>4</sup> is absent.
14. (currently amended) The compound of claim 1 or 2, wherein X represents O; [[R represents H; R<sup>1</sup> represents H; R<sup>2</sup> represents H;]] R<sup>3</sup> represents ethyl; and R<sup>4</sup> is absent.
15. (original) A formulation, comprising a compound of claim 1 or 2; and a pharmaceutically acceptable excipient.
16. (previously presented) A formulation, comprising a compound of claim 1 or 2; and a compound selected from the group consisting of analgesics, anti-inflammatory drugs, antipyretics, antidepressants, antiepileptics, antihistamines, antimigraine drugs, antimuscarinics, anxiolytics, sedatives, hypnotics, antipsychotics, bronchodilators, anti asthma drugs, cardiovascular drugs, corticosteroids, dopaminergics, electrolytes, gastrointestinal drugs, muscle relaxants, nutritional agents, vitamins, parasympathomimetics, stimulants, antinarcotic, and anorectics.
17. (original) A formulation, comprising a compound of claim 1 or 2; and a compound selected from the group consisting of aceclofenac, acetaminophen, adomoxetine, almotriptan, alprazolam, amantadine, amcinonide, aminocyclopropane, amitriptyline, amolodipine, amoxapine, amphetamine, aripiprazole, aspirin, atomoxetine, azasetron, azatadine, beclomethasone, benactyzine, benoxaprofen, bupropion, buspirone, biciprodil, bromocriptine, budesonide, buprenorphine, bupropion, buspirone, butorphanol, butriptyline, caffeine, carbamazepine, carbidopa, carisoprodol, celecoxib, chlordiazepoxide, chlorpromazine, choline salicylate, citalopram, clomipramine, clonazepam, clonidine, clonitazene, clorazepate, clotiazepam, cloxazolam, clozapine, codeine, corticosterone, cortisone, cyclobenzaprine, cyproheptadine, demexiptiline, desipramine, desomorphine, dexamethasone, dexanabinol, dextroamphetamine sulfate,

dextromoramide, dextropropoxyphene, dezocine, diazepam, dibenzepin, diclofenac sodium, diflunisal, dihydrocodeine, dihydroergotamine, dihydromorphine, dimetacrine, divalproxex, dizatriptan, dolasetron, donepezil, dothiepin, doxepin, duloxetine, ergotamine, escitalopram, estazolam, ethosuximide, etodolac, femoxetine, fenamates, fenoprofen, fentanyl, fludiazepam, fluoxetine, fluphenazine, flurazepam, flurbiprofen, flutazolam, fluvoxamine, frovatriptan, gabapentin, galantamine, gepirone, ginkgo bilboa, granisetron, haloperidol, huperzine A, hydrocodone, hydrocortisone, hydromorphone, hydroxyzine, ibuprofen, imipramine, indiplon, indomethacin, indoprofen, iprindole, ipsapirone, ketaserin, ketoprofen, ketorolac, lesopitron, levodopa, lipase, lofepramine, lorazepam, loxapine, maprotiline, mazindol, mefenamic acid, melatonin, melitracen, memantine, meperidine, meprobamate, mesalamine, metapramine, metaxalone, methadone, methadone, methamphetamine, methocarbamol, methyl dopa, methylphenidate, methylsalicylate, methysergid(e), metoclopramide, mianserin, mifepristone, milnacipran, minaprine, mirtazapine, moclobemide, modafinil, molindone, morphine, morphine hydrochloride, nabumetone, nadolol, naproxen, naratriptan, nefazodone, neurontin, nomifensine, nortriptyline, olanzapine, olsalazine, ondansetron, opipramol, orphenadrine, oxaflozane, oxaprazin, oxazepam, oxitriptan, oxycodone, oxymorphone, pancrelipase, parecoxib, paroxetine, pemoline, pentazocine, pepsin, perphenazine, phenacetin, phendimetrazine, phenmetrazine, phenylbutazone, phenytoin, phosphatidylserine, pimozide, pirlindole, piroxicam, pizotifen, pizotiline, pramipexole, prednisolone, prednisone, pregabalin, propranolol, propizepine, propoxyphene, protriptyline, quazepam, quinuclidine, reboxetine, reserpine, risperidone, ritanserin, rivastigmine, rizatriptan, rofecoxib, ropinirole, rotigotine, salsalate, sertraline, sibutramine, sildenafil, sulfasalazine, sulindac, sumatriptan, tacrine, temazepam, tetrabenazine, thiazides, thioridazine, thiothixene, tiapride, tiasipirone, tizanidine, tofenacin, tolmetin, tolloxatone, topiramate, tramadol, trazodone, triazolam, trifluoperazine, trimethobenzamide, trimipramine, tropisetron, valdecoxib, valproic acid, venlafaxine, viloxazine, vitamin E, zimeldine, ziprasidone, zolmitriptan, zolpidem, and zopiclone.

18. (currently amended) A method of treating a mammal suffering from depression, comprising the step of:

administering to said mammal a therapeutically effective amount of [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

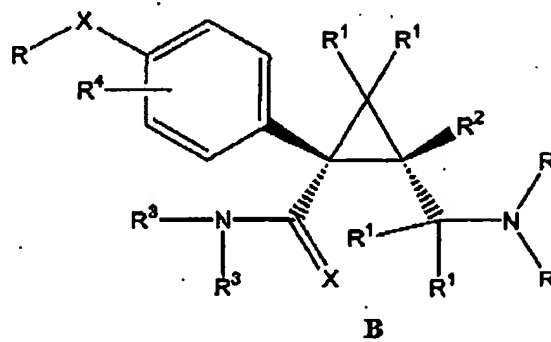
R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

m is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof; or

an isolated compound represented by B:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

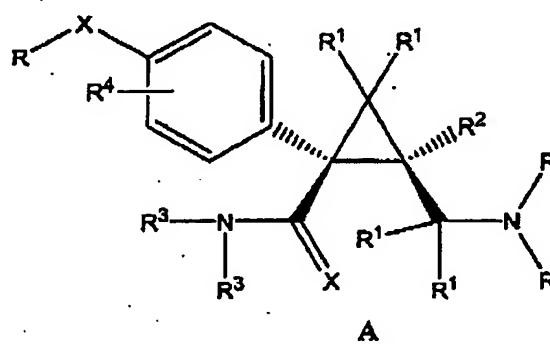
R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

m is independently for each occurrence an integer in the range 0 to 8 inclusive; and  
the compound is a single enantiomer; or  
a pharmaceutically acceptable salt or prodrug thereof.

19. (currently amended) A method of treating a mammal suffering from fibromyalgia syndrome, comprising the step of:

administering to said mammal a therapeutically effective amount of [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl,



(arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  
 $-(CH_2)_m-R_{80}$ ;

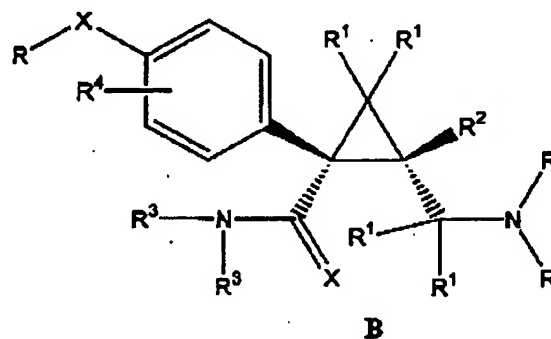
$R_{80}$  represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl,  
heterocyclyl, or polycyclyl moiety;

$m$  is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof; or

an isolated compound represented by B;



wherein

$X$  represents independently for each occurrence O or S;

$R$  represents independently for each occurrence H;

$R^1$  represents independently for each occurrence H;

$R^2$  represents independently for each occurrence H;

$R^3$  represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or  
arylalkyl;

$R^4$  is absent or present between one and four times inclusive;

$R^4$ , if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl,  
aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy,  
amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio,  
arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy.

(alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ;

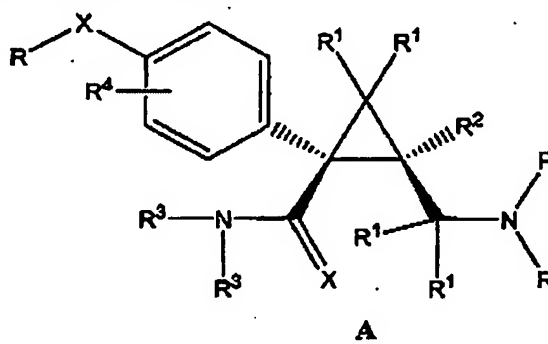
$R_{80}$  represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

$m$  is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

20. (currently amended) A method of treating a mammal suffering from mental disorders including Functional Somatic Disorders, for example, depression, fibromyalgia syndrome, chronic fatigue syndrome, pain, attention deficit/hyperactivity disorder, and visceral pain syndromes (VPS), such as irritable bowel syndrome (IBS), noncardiac chest pain (NCCP), functional dyspepsia, interstitial cystitis, essential vulvodynia, urethral syndrome, orchialgia, and affective disorders, including depressive disorders (major depressive disorder, dysthymia, atypical depression) and anxiety disorders (generalized anxiety disorder, phobias, obsessive compulsive disorder, panic disorder, post-traumatic stress disorder), premenstrual dysphoric disorder, temporomandibular disorder, atypical face pain, migraine headache, and tension headache, comprising the step of: administering to said mammal a therapeutically effective amount of [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

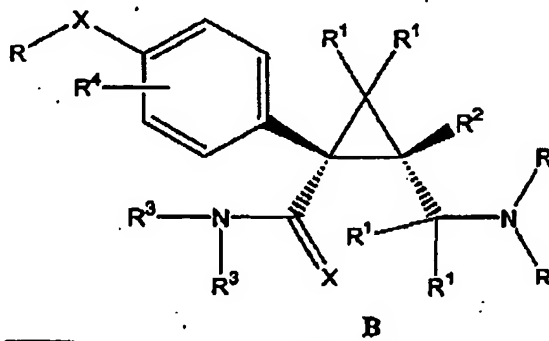
R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

m is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof; or

an isolated compound represented by B:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

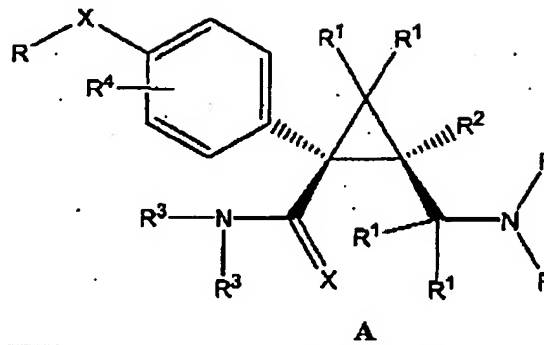
m is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

21. (original) The method of claim 18, 19, or 20, wherein said mammal is a primate, equine, canine or feline.
22. (original) The method of claim 18, 19, or 20, wherein said mammal is a human.
23. (original) The method of claim 18, 19, or 20, wherein said compound is administered orally.
24. (original) The method of claim 18, 19, or 20, wherein said compound is administered intravenously.

25. (original) The method of claim 18, 19, or 20, wherein said compound is administered sublingually.
26. (original) The method of claim 18, 19, or 20, wherein said compound is administered ocularly.
27. (original) The method of claim 18, 19, or 20, wherein said compound is administered transdermally.
28. (original) The method of claim 18, 19, or 20, wherein said compound is administered rectally.
29. (original) The method of claim 18, 19, or 20, wherein said compound is administered vaginally.
30. (original) The method of claim 18, 19, or 20, wherein said compound is administered topically.
31. (original) The method of claim 18, 19, or 20, wherein said compound is administered intramuscularly.
32. (original) The method of claim 18, 19, or 20, wherein said compound is administered subcutaneously.
33. (original) The method of claim 18, 19, or 20, wherein said compound is administered buccally.
34. (original) The method of claim 18, 19, or 20, wherein said compound is administered nasally.
35. (currently amended) A composition comprising a selective serotonin reuptake inhibitor and [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

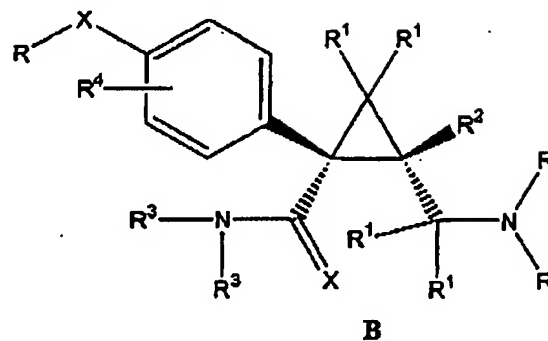
R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

m is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof; or

an isolated compound represented by B:



wherein

X represents independently for each occurrence O or S:

R represents independently for each occurrence H:

R<sup>1</sup> represents independently for each occurrence H:

R<sup>2</sup> represents independently for each occurrence H:

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl:

R<sup>4</sup> is absent or present between one and four times inclusive:

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>:

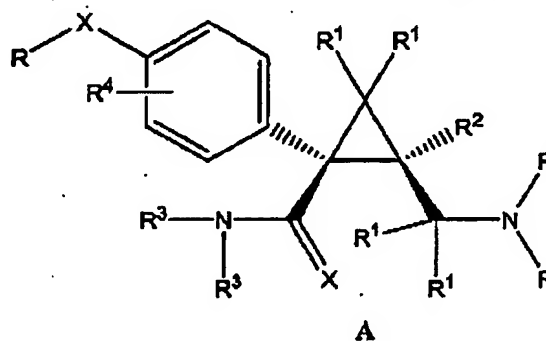
R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety:

m is independently for each occurrence an integer in the range 0 to 8 inclusive: and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

36. (currently amended) A composition comprising a selective norepinephrine reuptake inhibitor and [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

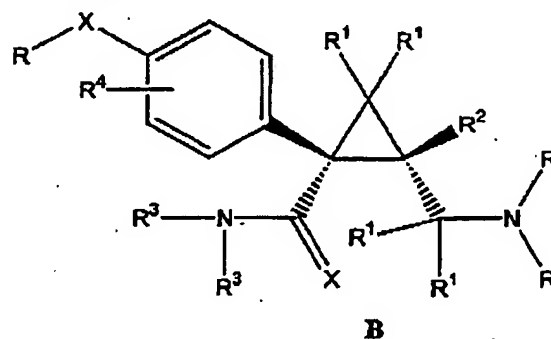
R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamine)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;



m is independently for each occurrence an integer in the range 0 to 8 inclusive; and  
the compound is a single enantiomer; or  
a pharmaceutically acceptable salt or prodrug thereof; or  
an isolated compound represented by B;



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy, (alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or -(CH<sub>2</sub>)<sub>m</sub>-R<sub>80</sub>;

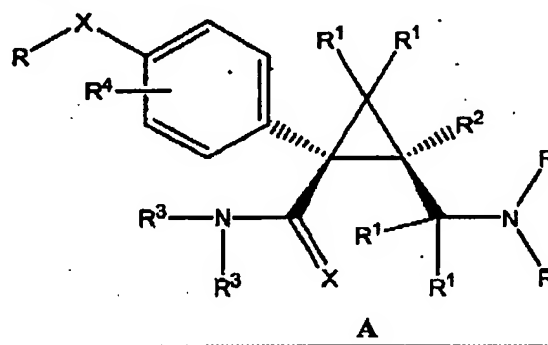
R<sub>80</sub> represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

m is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof.

37. (currently amended) A composition comprising a selective serotonin reuptake inhibitor, a selective norepinephrine reuptake inhibitor, and [[a compound of claim 1 or 2]] an isolated compound represented by A:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

R<sup>1</sup> represents independently for each occurrence H;

R<sup>2</sup> represents independently for each occurrence H;

R<sup>3</sup> represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

R<sup>4</sup> is absent or present between one and four times inclusive;

R<sup>4</sup>, if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxyl, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio, arylalkylthio, nitro, azido, alkylseleno, formyl, acyl, carboxyl, silyl, silyloxy,

(alkyloxy)carbonyl, (aryloxy)carbonyl, (arylalkyloxy)carbonyl, (alkylamino)carbonyl, (arylamino)carbonyl, (arylalkylamino)carbonyl, alkylsulfonyl, arylsulfonyl, or  $-(CH_2)_m-R_{80}$ ;

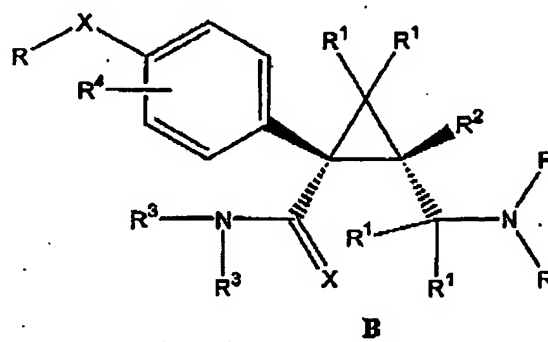
$R_{80}$  represents independently for each occurrence an aryl, cycloalkyl, cycloalkenyl, heterocyclyl, or polycyclyl moiety;

$m$  is independently for each occurrence an integer in the range 0 to 8 inclusive; and

the compound is a single enantiomer; or

a pharmaceutically acceptable salt or prodrug thereof; or

an isolated compound represented by B:



wherein

X represents independently for each occurrence O or S;

R represents independently for each occurrence H;

$R^1$  represents independently for each occurrence H;

$R^2$  represents independently for each occurrence H;

$R^3$  represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, or arylalkyl;

$R^4$  is absent or present between one and four times inclusive;

$R^4$ , if present, represents independently for each occurrence H, alkyl, cycloalkyl, alkenyl, aryl, heteroaryl, arylalkyl, cyano, halogen, hydroxyl, alkoxy, aryloxy, arylalkyloxy, amino, alkylamino, arylamino, arylalkylamino, sulfhydryl, alkylthio, arylthio,

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☒ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.